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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,924	06/01/2001	James J. deBlanc	10007686-1	3268

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

LEE, CHRISTOPHER E

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/872,924

Applicant(s)

DEBLANC ET AL.

Examiner

Christopher E. Lee

Art Unit

2112

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 18 June 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

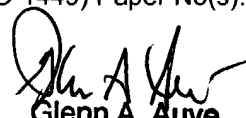
NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 1-3,5,7 and 11.Claim(s) objected to: none.Claim(s) rejected: 4,9,10,12-18 and 20.Claim(s) withdrawn from consideration: none.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
10. ☐ Other: _____


Glenn A. Auve
Primary Patent Examiner/cell
Technology Center 2100

Continuation of 5. does NOT place the application in condition for allowance because:

In response to the Applicants' arguments regarding to Claim 10 rejection under 35 U.S.C. 112, first paragraph on the Response pages 6-8, the Examiner respectfully disagrees.

In fact, the claimed subject matter "RD" is clearly defined in the specification, as an inline resistor (See Application, page 2, lines 20-22). Therefore, the claimed subject matter "impedance RD" should be interpreted as an impedance of the inline resistor (i.e., passive component).

In contrary to the Applicants' allegation, such that the Examiner has mistakenly limited the scope of the term "impedance" in the Final Office Action, the Applicants claim the limited subject matter "impedance RD" in the claim 10 instead of claiming the full scope of the term "impedance". In other words, the Applicants have limited the scope of the term "impedance" in the claim 10 because of the claim language "impedance RD", and thus the Examiner's interpretation of the claim language "impedance RD" based on the original specification should be an impedance of an inline resistor.

Furthermore, the specification clearly states "alternatively, active circuitry such as transistors and operational amplifiers may be used instead of passive components to achieve isolation" on the Application, page 11, lines 25-27 in contrary to the claimed invention, such that it needs "passive components" and "active circuitry", together, for achieving sufficient isolation in the Claim 10.

Thus, the Applicants' arguments on this point are not persuasive.

In response to the Applicants' arguments regarding to Claim 4 rejection under 35 U.S.C. 112, second paragraph on the Response page 9, the Examiner respectfully disagrees.

In contrary to the Applicants' statement, the claimed limitation "a range of approximately 1 K Ω to 25 K Ω " in Claim 4 does not specify a specific numerical range(s) being noted in MPEP 2173.05(c) because the term "approximately" makes the claimed limitation (i.e., range) indefinite. The specification does not clearly define the term "approximately", and thus no one could define the value of "approximately 1 K Ω to 25 K Ω " for the specific numerical range(s).

Thus, the Applicants' arguments on this point are not persuasive.

In response to the Applicants' arguments regarding to Claim 9 rejection under 35 U.S.C. 112, second paragraph on the Response pages 9-10, the Examiner respectfully disagrees.

In fact, the Applicants claim the limited subject matter "impedance RD" (i.e., impedance of inline resistor, which is a passive component) in the claim 1 instead of claiming the full scope of the term "impedance". Therefore, the dependent claim 9 of the claim 1 claims the broad recitation "the isolation circuitry comprises passive components", and it also recites "the isolation circuitry having an impedance RD" on its parent claim 1, which is the narrower statement of the range/limitation.

Thus, the Applicants' arguments on this point are not persuasive.

In response to the Applicants' argument with respect to "Contrary to the Examiner's assertions, Feldbaumer's switching circuit 18 is not used to change the logic levels of signal line 21. ... Switch 18 is used to enable or disable active termination of the signal line - not to change the bus logic levels." on the Response page 12, lines 6-19, the Examiner respectfully disagrees.

In fact, it is noted that the features upon which applicants rely (i.e., switching circuit being used to change the logic levels of signal line) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The Applicants merely claim the subject matter "switching circuitry" with the limitation "selectively couples a terminal of the associated current limiting element to a supply level to select a logic level of the associated signal line" in lines 10-13 of the claim 12. This claimed limitation is suggested by Feldbaumer, such that a switchable active bus termination circuit (Fig. 1) comprising switching circuitry (i.e., switching circuit 18 of Fig. 1) for signal line of a common bus (i.e., electrical conductor 21 of Fig. 1), wherein said switching circuitry selectively couples a second terminal (i.e., connection point on terminal resistor 20 for switching circuit 18 in Fig. 1) of an associated first current limiting element (i.e., resistor 20 of Fig. 1) to a second supply level (i.e., 2.85 volt reference signal level) to select a logic level (i.e., asserted device logic signal level) of said associated signal line (See col. 2, lines 54-65).

Thus, the Applicants' argument on this point is not persuasive.

In response to the Applicants' argument with respect to "Even if one accepted the Examiner's arguments, applicant respectfully submits that it is not clear how the Examiner has proposed combining Takekuma and Feldbaumer in a workable manner consistent with the teachings of both. ... Moreover, it is not clear how the Examiner is coupling a first terminal of Takekuma's/Feldbaumer's current limiting element to a first supply level while using the termination circuitry of Feldbaumer to switch a second terminal of the current limiting element to a second supply level. ..." on the Response page 12, line 20 through page 14, line 12, the Examiner respectfully disagrees. In fact, it has been held that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references, but simply what the combination of references makes obviousness to one of ordinary skill in the pertinent art. See *In re Bozek*, 163 USPQ 545 (CCPA 1969). In other words, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the Examiner has clearly pointed out rationale for appropriate combination of the references Takekuma, Feldbaumer and Matsuoka, and it shows the obviousness of the claimed invention, such that (1) Takekuma discloses a common bus (i.e., transmission bus 100 of Fig. 11) comprising a signal line (i.e., transmission bus line) having first terminal (i.e., left-most connection point on transmission line 100 for terminal resistor 50 in Fig. 11) of an associated first current limiting element (i.e., termination resistors 50 and 51 in Fig. 11) d.c. coupled to a first supply level (See col. 7, lines 10-13), said first current limiting element of impedance RA (i.e., each termination resistor has 50 Ω ; See col. 7, lines 10-11); isolation circuitry (i.e., resistors 80-83 in Fig. 11) electrically coupling each of said signal line of said common bus to a plurality of electronic devices (i.e., circuit blocks 1-4 in Fig. 11; See col. 7, lines 1-7), each device having a corresponding signal line to enable communication of signals between said common bus and said plurality of electronic devices (See col. 1, lines 33+), and (2) Feldbaumer discloses a switchable active bus termination circuit (Fig. 1), wherein said bus termination circuit comprising switching circuitry (i.e., switching circuit 18 of Fig. 1) for signal line of a common bus (i.e., electrical conductor 21 of Fig. 1), wherein said switching circuitry selectively couples a second terminal (i.e.,

connection point on terminal resistor 20 for switching circuit 18 in Fig. 1) of an associated first current limiting element (i.e., resistor 20 of Fig. 1) to a second supply level to select a logic level of said associated signal line (See col. 2, lines 54-65). (3) Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said switchable active bus termination circuit, as disclosed by Feldbaumer, in said apparatus, as disclosed by Takekuma, so as to reduce signal reflections with said passive resistor termination being inherent drift and inaccuracies of setting resistor values (See Feldbaumer, col. 1, lines 38-47 and col. 4, lines 19-22).

In contrary to the Applicants' statement, the Examiner does not propose substitution of Feldbaumer's active termination circuitry for one or both of the termination resistors of Takekuma. Instead, the Examiner shows the obviousness of the claimed invention by including Feldbaumer's switchable active bus termination circuit in Takekuma's apparatus so as to reduce signal reflections with said passive resistor termination being inherent drift and inaccuracies of setting resistor values, which is disclosed by Feldbaumer at col. 1, lines 38-47 and at col. 4, lines 19-22.

Moreover, all the dependent claims of the claim 12 are rejected under 35 U.S.C. § 103 were based on additional combinations with Graham, Pemberton, Wrggers, and Fisher.

Thus, the Applicant's argument on this point is not persuasive.

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